

**What is claimed is:**

- Sub A/S
1. An active endoscopic PhotoDynamic Therapy (PDT) comprising:  
 A distal and a proximal end;  
 A radiation source positioned at said distal end;  
 Wherein said source provides a diffuse radiation pattern across a section of body tissue, which is large compared to said endoscopic device's distal cross section, and which is in proximity to said distal end; and  
 Wherein said radiation source is powered remotely and operates at a pre-selected wavelength and power range compatible with requirements of a selected PDT drug.
  2. An active endoscopic device according to claim 1, wherein said radiation source is a multitude of diodes mounted on said device's distal end so as to create an illumination pattern to effectively irradiate a selected treatment site.
  3. An active endoscopic device according to claim 2, wherein said diodes are diode lasers.
  4. An active endoscopic device according to claim 2, wherein said diode lasers comprise lasers operating at different wavelengths.
  5. An active endoscopic device according to claim 1, wherein said radiation source is provided by chemiluminescence.
  6. An active endoscopic device according to claim 1, further comprising cooling means.
  7. An active endoscopic device according to claim 1, further comprising means to deliver a substance which will be activated by said radiation.
  8. ~~An active endoscopic device according to claim 1, further comprising means to deliver a substance which will be activated by said radiation.~~
  9. An active endoscopic device according to claim 1, further comprising at least one balloon to serve as a centering mechanism.
  10. An active endoscopic device according to claim 9, wherein said homogenizing means is a partially reflective coating on said at least one balloon.

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- 11 A method of performing PhotoDynamic Therapy with an active endoscopic device such as in claim 1, comprising the steps of:
- (a) positioning a catheter/endoscope into a patient and directing it to a predetermined treatment site within said patient.
  - (b) Placing said active endoscopic device into said endoscope/catheter and advancing it so that its distal end with its radiation source are at a distal end of said endoscope; and
  - (c) Energizing said radiationn source and irradiating said selected treatment site for times and periods to achieve said PDT treatment for said selected treatment sites.

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